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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,411	02/18/2004	Alfredo Li Preti	60,137-245	3061
26096	7590	11/30/2006		
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			EXAMINER LUK, EMMANUEL S	
			ART UNIT 1722	PAPER NUMBER

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/781,411

**Applicant(s)**

LI PRETI ET AL.

**Examiner**

Emmanuel S. Luk

**Art Unit**

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6-9, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Schluter (3975128).

Schluter teaches a mold valve chamber (20) having an output port (17) on the first axis (Fig. 1) with a mold valve piston (16) and air introduction system (25,34), an injection chamber (1) on a second axis (Fig. 1), an injection piston (3) that is movable in the injection chamber (A), and **clearly** defines a portion of the mold valve chamber inner perimeter (Figures 2 through 4, emphasis on Figure 4). The blower (25) can be operated to inject air into the chamber and thus into the mold, therefore it is selectively operated AND is capable of injecting air into the chamber. Schluter clearly teaches the claimed structures.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3-5, 10, and 15-17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schluter (3975128) in view of Takizawa et al (5770245).

Schluter fails to teach the piston configuration.

Takizawa teaches a piston (32) having seal rings (31). These are equivalent to the nonmetallic portion being between metallic portions, either from one portion or two separate portions. The seal ring will provide an 'interference fit' within the inner perimeter of the chamber.

It would have been obvious one of ordinary skill in the art to modify Schluter with the nonmetallic portion between two metallic portions as taught by Takizawa because it provides a seal for the valve within the chamber.

In regards to claims 10, 15, and 17, the claims do not teach a structural limitation and merely states the air injection system communicating in response to a position of a mold valve piston. The limitation provided is akin to a process of using the apparatus in response to a condition and provides no structural limitation.

In regards to 4 and 5, Schluter shows a mold valve piston in the extended position (Fig. 1), the passage of the air inlet is blocked by the mold valve piston.

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Thereby, Schluter teaches a mold valve piston that is selectively movable to block the air inlet.

In regards to the arcuate segment, Schluter clearly teaches defining the a portion of the mold valve chamber and thereby it would have been obvious for one of ordinary skill in the art to modify the injection piston end to conform to the shape of the mold valve chamber and respective piston to thereby allow for a shape that will conform to the rest of the interior surface because it would allow for movement of the mold valve piston through the chamber without interference.

### ***Response to Arguments***

6. Applicant's arguments filed 9/14/06 have been fully considered but they are not persuasive. Applicant's argument concerning Schluter have been considered, however, Schluter clearly teaches the claimed apparatus including the forming the "injection piston" forming the inner perimeter of the "mold valve chamber" as claimed and since it does form a portion of the perimeter, it does extend into the mold valve chamber.

In regards to arguments concerning the use of Takizawa, Examiner again repeats the reason for an improved fit and thereby the reason for using Takizawa with Schluter. In regards to claims 4 and 5 and further with 10, 15, and 17, the position of the piston (35) can selectively cut off the air flow (34), see Figure 1 with the piston in the extended position, it is capable of effectively blocking off any air from being introduced into the system.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Fridays from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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